

CLAIMS

It is claimed:

1. A method of application independent telephone call initiation, the method comprising
providing a computer having a display, an input device, an application program and a
telephone call module

the application program comprising an integrated body of computer software
comprised of one or more files, modules or parts that calls operating system services and
performs work for a user

the telephone call module comprising software distinct from the application
program and operating apart from the application program

the application program causing a telephone number to be displayed on the display
a user using the input device to activate the displayed telephone number
the telephone call module recognizing the activation of the displayed telephone
number

the telephone call module, in response to recognizing the activation of the displayed
telephone number, causing a signal to be sent to a switch instructing the switch to initiate a
telephone call between a predefined telephone number and the displayed telephone number.

2. The method of application independent telephone call initiation of claim 1 further
comprising

the user using the input device to activate a second telephone number

the telephone call module recognizing the activation of the second telephone number

the telephone call module, in response to recognizing the activation of the second telephone number, causing a second signal to be sent to the switch instructing the switch to initiate a conference call between the predefined telephone number, the displayed telephone number and the second telephone number.

3. The method of application independent telephone call initiation of claim 2 wherein the signal and the second signal are joined in a single message to the switch.

4. The method of application independent telephone call initiation of claim 1, wherein the causing step includes transmitting the predefined telephone number and the displayed telephone number to the switch.

5. The method of application independent telephone call initiation of claim 1 further comprising:

the telephone call module receiving call status information from the switch

the telephone call module causing the call status information to be provided to the user.

6. The method of application independent telephone call initiation of claim 5, wherein the step of the telephone call module causing the call status information to be provided to the user comprises displaying the call status information.

7. The method of application independent telephone call initiation of claim 5, wherein the call status information comprises a status selected from the group including connected, dropped, busy and closed.

8. The method of application independent telephone call initiation of claim 1 further comprising the telephone call module sending a call initiation message for causing the signal to be sent to the switch.

9. The method of application independent telephone call initiation of claim 8 wherein the telephone call module sends the call initiation message directly to the switch.

10. The method of application independent telephone call initiation of claim 8 wherein the telephone call module sends the call initiation message to a server, the sending step further comprising opening a dedicated TCP connection to authenticate the user and start a call session with the server.

11. The method of application independent telephone call initiation of claim 8 wherein the call initiation message comprises one or more HTTP requests.

12. The method of application independent telephone call initiation of claim 8 wherein the call initiation message comprises one or more SIP messages sent on a data network.

13. A computer program product stored on a machine readable medium comprising computer software distinct from an application program and operating apart from the application program, the computer software having instructions for causing a processor to:

recognize activation by a user of a telephone number displayed by an application program

in response to recognizing the activation of the displayed telephone number, cause a signal to be sent to a switch instructing the switch to initiate a telephone call between a predefined telephone number and the displayed telephone number.

14. The computer program product of claim 13 further comprising computer software having instructions for causing the processor to

recognize activation of a second telephone number

in response to recognizing the activation of the second telephone number, cause a second signal to be sent to the switch instructing the switch to initiate a conference call between the predefined telephone number, the displayed telephone number and the second telephone number.

15. The computer program product of claim 14 wherein the signal and the second signal are joined in a single message to the switch.

16. The computer program product of claim 13 further comprising computer software having instructions for causing the processor to

receive call status information from the switch

cause the call status information to be provided to the user.

17. The computer program product of claim 16, wherein the computer software having instructions to cause the call status information to be provided to the user comprises instructions to display the call status information.

18. The computer program product of claim 16, wherein the call status information comprises a status selected from the group including connected, dropped, busy and closed.

19. The computer program product of claim 13 further comprising computer software having instructions for causing the processor to send a call initiation message for causing the signal to be sent to the switch.

20. The computer program product of claim 19 wherein the instructions for causing the processor to send the call initiation message comprise instructions for sending the call initiation message to the switch.

21. The computer program product of claim 19 wherein the instructions for causing the processor to send the call initiation message comprise instructions for causing the processor to

open a dedicated TCP connection to authenticate the user

start a call session with the server

send the call initiation message to the server.

22. The computer program product of claim 19 wherein the call initiation message comprises one or more HTTP requests.

23. The computer program product of claim 19 wherein the call initiation message comprises one or more SIP messages sent on a data network.

24. A general purpose computer comprising the computer program product of claim 13, the application program, a display for displaying the telephone number, a user input device for receiving the activation, and a communications interface for sending the signal to the switch.

25. The computer program product of claim 13 wherein the computer software comprises a second application program.

26. The computer program product of claim 13 wherein the computer software comprises a dynamic linked library.

27. A client computer for application independent telephone call initiation, the client computer comprising:

a user input device

a display device

a processor

a memory

wherein the processor and the memory comprise circuits and software for

recognizing activation by a user of a telephone number displayed by an

application program

in response to recognizing the activation of the displayed telephone number,

causing a signal to be sent to a switch instructing the switch to initiate a telephone call

between a predefined telephone number and the displayed telephone number.

28. The client computer for application independent telephone call initiation of claim 27, wherein the processor and the memory further comprise circuits and software for

recognizing activation of a second telephone number

in response to recognizing the activation of the second telephone number, causing a second signal to be sent to the switch instructing the switch to initiate a conference call between the predefined telephone number, the displayed telephone number and the second telephone number.

29. The client computer for application independent telephone call initiation of claim 28 wherein the signal and the second signal are joined in a single message to the switch.

30. The client computer for application independent telephone call initiation of claim 27 wherein the processor and the memory further comprise circuits and software for

receiving call status information from the switch

causing the call status information to be provided to the user.

31. The client computer for application independent telephone call initiation of claim 16, wherein the processor and the memory further comprise circuits and software for displaying the call status information.

32. The client computer for application independent telephone call initiation of claim 16, wherein the call status information comprises a status selected from the group including connected, dropped, busy and closed.

33. The client computer for application independent telephone call initiation of claim 27 wherein the processor and the memory further comprise circuits and software for sending a call initiation message for causing the signal to be sent to the switch.

34. The client computer for application independent telephone call initiation of claim 33 wherein the processor and the memory further comprise circuits and software for sending the call initiation message to the switch.

35. The client computer for application independent telephone call initiation of claim 33 wherein the processor and the memory further comprise circuits and software for

- opening a dedicated TCP connection to authenticate the user
- starting a call session with the server
- sending the call initiation message to the server.

36. The client computer for application independent telephone call initiation of claim 33 wherein the call initiation message comprises one or more HTTP requests.

37. The client computer for application independent telephone call initiation of claim 33 wherein the call initiation message comprises one or more SIP messages sent on a data network.

38. The client computer for application independent telephone call initiation of claim 27 wherein the software comprises an application program and a telephone call module distinct from the application program.

39. A method of server-based telephone call initiation, the method comprising

providing a server having a network application program and a telephone call module
the application program sending a message to a client computer for causing a first
telephone number to be displayed by the client computer

the application program receiving a message from the client computer that the
displayed telephone number has been activated

the telephone call module, in response to receiving the message, causing a signal to be
sent to a switch instructing the switch to initiate a telephone call between a second,
predefined telephone number and the first telephone number.

40. The method of server-based telephone call initiation of claim 39 further comprising

the telephone call module receiving a message from the client computer that a third
telephone number has been activated

the telephone call module, in response to receiving the message that the third
telephone number has been activated, causing a second signal to be sent to the switch
instructing the switch to initiate a conference call between the first telephone number, the
second telephone number and the third telephone number.

41. The method of server-based telephone call initiation of claim 40 wherein the signal and
the second signal are joined in a single message to the switch.

42. The method of server-based telephone call initiation of claim 39, wherein the causing step
includes transmitting the first telephone number and the second telephone number to the
switch.

43. The method of server-based telephone call initiation of claim 39 further comprising:

the telephone call module receiving call status information from the switch

the telephone call module sending the call status information to the client computer.

44. The method of server-based telephone call initiation of claim 39 further comprising the telephone call module sending a call initiation message for causing the signal to be sent to the switch.

45. The method of server-based telephone call initiation of claim 44 wherein the telephone call module sends the call initiation message directly to the switch.

46. The method of server-based telephone call initiation of claim 44 wherein the telephone call module sends the call initiation message to another server.

47. The method of server-based telephone call initiation of claim 44 wherein the call initiation message comprises one or more HTTP requests.

48. The method of server-based telephone call initiation of claim 44 wherein the call initiation message comprises one or more SIP messages sent on a data network.

49. A computer program product stored on a machine readable medium comprising computer software having instructions for causing a processor to:

send a message to a client computer for causing a first telephone number to be

displayed by the client computer

receive a message from the client computer that the displayed telephone number has been activated

in response to receiving the message, cause a signal to be sent to a switch instructing the switch to initiate a telephone call between a second, predefined telephone number and the first telephone number.

50. The computer program product of claim 49 further comprising computer software having instructions for causing the processor to:

receive a message from the client computer that a third telephone number has been activated

in response to receiving the message that the third telephone number has been activated, cause a second signal to be sent to the switch instructing the switch to initiate a conference call between the first telephone number, the second telephone number and the third telephone number.

51. The computer program product of claim 50 wherein the signal and the second signal are joined in a single message to the switch.

52. The computer program product of claim 49, wherein the instructions for causing the processor to cause include instructions for causing the processor to transmit the first telephone number and the second telephone number to the switch.

53. The computer program product of claim 49 further comprising instructions for causing the processor to:

receive call status information from the switch

send the call status information to the client computer.

54. The computer program product of claim 49 further comprising instructions for causing the processor to send a call initiation message for causing the signal to be sent to the switch.

55. The computer program product of claim 54 wherein the call initiation message is sent directly to the switch.

56. The computer program product of claim 54 wherein the call initiation message is sent to a server.

57. The computer program product of claim 54 wherein the call initiation message comprises one or more HTTP requests.

58. The computer program product of claim 54 wherein the call initiation message comprises one or more SIP messages sent on a data network.